

## ONLINE-ONLY SUPPLEMENTARY MATERIAL

### **Ethnic differences in risk factors for obesity in New Zealand infants**

Laura D Howe<sup>\*1,2,3</sup>, Lis Ellison-Loschmann<sup>3</sup>, Neil Pearce<sup>3,4</sup>, Jeroen Douwes<sup>3</sup>, Mona Jeffreys<sup>2</sup>, Ridvan Firestone<sup>3</sup>

1 - MRC Integrative Epidemiology Unit at the University of Bristol, University of Bristol, Bristol, UK

2 - School of Social and Community Medicine, University of Bristol, Bristol, UK

3 - Centre for Public Health Research, Massey University, Wellington, New Zealand

4 - London School of Hygiene and Tropical Medicine, London, UK

\* Corresponding author. MRC Integrative Epidemiology Unit at the University of Bristol, Oakfield House, Oakfield Grove, Bristol BS8 2BN, UK. Email: [laura.howe@bristol.ac.uk](mailto:laura.howe@bristol.ac.uk)

**Supplementary Table 1. Distributions of variables in the observed and imputed data.**  
Values are % or mean (SD)

	Imputed data	Observed data	
		N	
<b>Socio-demographic variables</b>			
Child's ethnicity			
<i>European</i>	71.8%	687	71.8%
<i>Māori or Pacific</i>	16.7%		16.7%
<i>Other</i>	11.5%		11.5%
Mother educated to less than degree level	15.8%	544	15.1%
Mother's age			
<25 years	9.1%	545	7.9%
25 to <35 years	63.3%		64.6%
≥ 35 years	27.7%		27.5%
NZ Deprivation Index 2006			
1 ( <i>lowest deprivation</i> )	25.9%	544	26.1%
2	28.2%		27.9%
3	19.5%		19.5%
4	16.7%		16.9%
5 ( <i>highest deprivation</i> )	9.7%		9.6%
<b>Maternal, pregnancy and delivery characteristics</b>			
Maternal pre-pregnancy BMI			
<25 kg/m <sup>2</sup>	57.8%	529	58.2%
25 to <30 kg/m <sup>2</sup>	27.3%		27.2%
≥30 kg/m <sup>2</sup>	15.0%		14.6%
Mother did physical activity pre-pregnancy	82.9%	543	83.4%
Mother's diet in pregnancy*			
<i>Processed foods (SD)</i>	0.0 (1.0)	927	0.0 (1.00)
<i>Snacks (SD)</i>	0.0 (1.0)	927	0.0 (1.00)
<i>Healthy foods (SD)</i>	0.0 (1.0)	927	0.0 (1.00)
<i>Sweet foods (SD)</i>	0.0 (1.0)	927	0.0 (1.00)
<i>Starchy foods (SD)</i>	0.0 (1.0)	927	0.0 (1.00)
Hypertension in pregnancy	12.8%	685	12.9%
Diabetes in pregnancy	3.8%	685	3.8%
<b>Infancy characteristics</b>			
Child's weight in first week (kg)	3.52 (0.58)	671	3.52 (0.58)
Child's weight at 3 months (kg)	6.06 (0.89)	636	6.05 (0.89)
Exclusive breastfeeding in first 3 days	79.7%	677	80.2%
Exclusive breastfeeding at 3 months	53.2%	684	53.2%
Solid foods introduced by 3 months	30.0%	682	30.1%

\* Dietary pattern scores are standardised to have a mean of zero and variance of one; values in this table can therefore be interpreted as standard deviations from the overall population mean

**Supplementary Table 2. Characteristics of participants.** Values are mean (SD) or number (%)

	Participants with data on all variables N=422	Participants not included in complete case analysis due to missing data on one or more variables		P value*
		% with missing data on this variable		
<b>Socio-demographic variables</b>				
Child's ethnicity				
<i>European</i>	307 (72.8%)	22%	186 (70.2%)	
<i>Māori or Pacific</i>	64 (15.2%)		51 (19.3%)	
<i>Other</i>	51 (12.1%)		28 (10.6%)	0.35
Mother educated to less than degree level	60 (14.2%)	52%	118 (19.3%)	0.03
Mother's age				
<25 years	31 (7.4%)	52%	84 (13.6%)	
25 to <35 years	277 (65.6%)		359 (58.2%)	
≥ 35 years	114 (27.0%)		174 (28.2%)	0.004
NZ Deprivation Index 2006				
1 ( <i>lowest deprivation</i> )	109 (25.8%)	52%	167 (27.1%)	
2	118 (28.0%)		127 (20.6%)	
3	84 (19.9%)		144 (23.4%)	
4	73 (17.3%)		103 (16.7%)	
5 ( <i>highest deprivation</i> )	38 (9.0%)		75 (12.2%)	0.05
<b>Maternal, pregnancy and delivery characteristics</b>				
Maternal pre-pregnancy BMI				
<25 kg/m <sup>2</sup>	245 (58.1%)	49%	331 (56.8%)	
25 to <30 kg/m <sup>2</sup>	113 (26.8%)		170 (29.2%)	
≥30 kg/m <sup>2</sup>	64 (15.2%)		82 (14.1%)	0.68
Mother did physical activity pre-pregnancy**	354 (83.9%)	52%	506 (82.1%)	0.46
Mother's diet in pregnancy				
<i>Processed foods (SD)</i>	-0.04 (1.02)	43%	0.03 (1.02)	0.25
<i>Snacks (SD)</i>	-0.06 (1.00)	43%	0.05 (1.00)	0.08
<i>Healthy foods (SD)</i>	0.07 (1.00)	43%	-0.06 (1.00)	0.04
<i>Sweet foods (SD)</i>	0.00 (0.98)	43%	0.00 (1.02)	0.97
<i>Starchy foods (SD)</i>	-0.01 (1.01)	43%	0.01 (0.99)	0.77
Hypertension in pregnancy	50 (11.9%)	22%	38 (14.6%)	0.32
Diabetes in pregnancy	15 (3.6%)	22%	11 (4.2%)	0.68
<b>Infancy characteristics</b>				
Child's weight in first week (kg)	3.54 (0.56)	21%	3.49 (0.60)	0.27
Child's weight at 3 months (kg)	6.05 (0.89)	18%	6.07 (0.88)	0.74
Exclusive breastfeeding in first 3 days	340 (80.6%)	22%	203 (79.6%)	0.76
Exclusive breastfeeding at 3 months	225 (53.3%)	22%	139 (53.1%)	0.95
Solid foods introduced by 3 months	125 (29.6%)	22%	80 (30.8%)	0.75

\*P value testing the null hypothesis that the mean or percentage does not differ between those included in analyses and those excluded due to missing data; p values are generated from t-tests or chi-squared tests

\*\* Dietary pattern scores are standardised to have a mean of zero and variance of one; values in this table can therefore be interpreted as standard deviations from the overall population mean

**Supplementary Table 3. Principal component analysis of dietary data; first five principal components**

Values are 'eigenvectors' from rotated principal components, which can be interpreted as weights assigned to the food items within each dietary pattern. For example in the 'high fat, low fruit & veg, high sugar' dietary pattern, Pies has a large positive weight (0.2660) whereas fresh fruit has a low negative weight (-0.1158). Therefore the more often a woman reports eating pies, the higher her score for the 'high fat, low fruit & veg, high sugar' dietary pattern will be, and vice versa for fresh fruit.

	<i>Processed</i>	<i>Snacks</i>	<i>Healthy foods</i>	<i>Sweet foods</i>	<i>Starchy foods</i>
<i>Proportion of variance explained</i>	<b>0.10</b>	<b>0.08</b>	<b>0.07</b>	<b>0.07</b>	<b>0.06</b>
<b>Boiled veg</b>	-0.0550	-0.0904	-0.0589	0.0755	-0.0248
<b>Stir fry veg</b>	-0.1217	0.2198	0.2764	-0.2163	0.2529
<b>Frozen veg</b>	0.0911	0.0129	0.0001	-0.0106	-0.0811
<b>Fresh fruit</b>	0.0679	0.0136	0.3655	-0.0234	0.1058
<b>Oats</b>	-0.0790	0.0568	0.3979	0.1189	-0.0566
<b>European bread</b>	0.0317	0.0371	-0.4535	0.0586	0.0806
<b>Brown bread</b>	0.0881	-0.0550	0.4737	0.0108	-0.1140
<b>Pulses</b>	0.0253	0.0367	0.3548	-0.0153	0.1480
<b>Cheese</b>	0.2632	-0.2813	0.1399	0.3055	-0.0519
<b>Pies</b>	0.3346	0.0332	-0.0116	-0.0698	0.0504
<b>Sausages</b>	0.1386	-0.0734	-0.0678	0.0224	0.0755
<b>Burgers</b>	0.3757	0.0220	0.0536	-0.0711	-0.0577
<b>Pizza</b>	0.4259	-0.0897	0.0468	0.0795	-0.0322
<b>Chips</b>	0.4604	0.0833	0.0001	-0.0459	-0.0200
<b>Bbq foods</b>	-0.0287	-0.0053	0.0629	0.0455	0.0251
<b>Fried foods</b>	0.3338	0.0018	-0.0840	0.0254	0.1339
<b>Rice</b>	-0.0756	0.0559	-0.0245	-0.0691	0.6786
<b>Pasta</b>	0.1135	-0.1401	-0.0166	0.1475	0.5898
<b>Pudding</b>	0.0112	0.0033	-0.0354	0.4921	0.0070
<b>Biscuits</b>	-0.0365	0.1113	-0.0066	0.4777	0.0216
<b>Cake</b>	-0.0372	0.1240	-0.0012	0.4789	0.0338
<b>Chocolate bars</b>	-0.0032	0.4619	-0.0749	0.1158	-0.0653
<b>Chocolate</b>	-0.0133	0.4698	0.1081	0.1568	-0.0180
<b>Sweets</b>	0.0388	0.4489	-0.0015	0.0042	-0.0318
<b>Crips</b>	0.1951	0.2895	-0.0607	-0.0494	0.1189
<b>Fizzy drinks</b>	0.2126	0.2514	-0.0934	-0.2176	-0.0952

**Supplementary Table 4. Association between child's ethnicity and socio-demographic variables in participants with complete data on all variables. N=422**

Values are odds ratios (95% confidence intervals) comparing Māori or Pacific children and Other Ethnicity children to European children.

	European N=307	Māori or Pacific N=64	Other N=51
Mother educated to less than degree level	1 (ref)	1.67 (0.84 to 3.28) P=0.13	0.24 (0.06 to 1.04) P=0.06
Mother's age			
<25 years	1 (ref)	2.65 (1.18 to 5.98) P=0.02	0.28 (0.04 to 2.16) P=0.22
25 to <35 years	1 (ref)	1 (ref)	1 (ref)
≥ 35 years	1 (ref)	0.50 (0.24 to 1.05) P=0.07	0.76 (0.39 to 1.50) P=0.43
NZ Deprivation Index 2006			
1 (lowest deprivation)	1 (ref)	1 (ref)	1 (ref)
2	1 (ref)	2.05 (0.83 to 5.08) P=0.12	2.46 (1.02 to 5.95) P=0.05
3	1 (ref)	2.48 (0.97 to 6.33) P=0.06	1.91 (0.71 to 5.10) P=0.20
4	1 (ref)	5.81 (2.38 to 14.18) P<0.001	2.77 (1.02 to 7.51) P=0.05
5 (highest deprivation)	1 (ref)	3.13 (1.04 to 9.44) P=0.04	2.24 (0.67 to 7.41) P=0.19

**Supplementary Table 5. Association between child's ethnicity and known risk factors for later obesity in participants with complete data on all variables (unadjusted).**

**N=422**

Values are odds ratios or mean differences (95% confidence intervals) comparing Māori or Pacific children and Other Ethnicity children to European children.

	European N=307	Māori or Pacific N=64	Other N=51
<b>Categorical risk factors; odds ratios and 95% confidence intervals</b>			
Maternal pre-pregnancy BMI			
<25 kg/m <sup>2</sup>	1 (ref)	1 (ref)	1 (ref)
25 to <30 kg/m <sup>2</sup>	1 (ref)	1.28 (0.67 to 2.44) P=0.46	1.32 (0.69 to 2.53) P=0.40
≥30 kg/m <sup>2</sup>	1 (ref)	2.16 (1.09 to 4.29) P=0.03	0.56 (0.19 to 1.66) P=0.30
Mother did physical activity pre-pregnancy	1 (ref)	1.28 (0.59 to 2.74) P=0.53	1.56 (0.64 to 3.86) P=0.33
Hypertension in pregnancy	1 (ref)	1.59 (0.74 to 3.43) P=0.24	1.60 (0.69 to 3.70) P=0.27
Diabetes in pregnancy	1 (ref)	0.87 (0.19 to 4.01) P=0.86	1.10 (0.24 to 5.11) P=0.91
Exclusive breastfeeding in first 3 days	1 (ref)	0.95 (0.49 to 1.86) P=0.89	1.13 (0.52 to 2.46) P=0.75
Exclusive breastfeeding at 3 months	1 (ref)	0.98 (0.57 to 1.68) P=0.94	1.55 (0.84 to 2.85) P=0.16
Solid foods introduced by 3 months	1 (ref)	1.42 (0.80 to 2.50) P=0.23	1.05 (0.55 to 2.02) P=0.88
<b>Continuous risk factors; mean differences and 95% confidence intervals</b>			
Mother's diet in pregnancy*			
<i>Processed foods (SD)</i>	0 (ref)	0.10 (-0.16 to 0.37) P=0.44	-0.10 (-0.39 to 0.18) P=0.48
<i>Snacks (SD)</i>	0 (ref)	0.25 (-0.02 to 0.52) P=0.07	-0.18 (-0.48 to 0.11) P=0.22
<i>Healthy foods (SD)</i>	0 (ref)	-0.06 (-0.33 to 0.21) P=0.65	0.09 (-0.21 to 0.39) P=0.56
<i>Sweet foods (SD)</i>	0 (ref)	-0.29 (-0.56 to -0.03) P=0.03	-0.01 (-0.30 to 0.28) P=0.94
<i>Starchy foods (SD)</i>	0 (ref)	0.23 (-0.04 to 0.50) P=0.10	0.40 (0.10 to 0.70) P=0.01
Child's weight in first week (kg)	0 (ref)	0.04 (-0.12 to 0.19) P=0.64	-0.11 (-0.27 to 0.06) P=0.21
Child's weight at 3 months (kg)	0 (ref)	0.13 (-0.11 to 0.37) P=0.30	0.04 (-0.23 to 0.30) P=0.79

\* Dietary pattern scores are standardised to have a mean of zero and variance of one; values in this table can therefore be interpreted as standard deviations from the overall population mean

**Supplementary Table 6. Association between child's ethnicity and known risk factors for later obesity in participants with complete data on all variables (with adjustment for socio-demographic characteristics). N=422**

Values are odds ratios or mean differences (95% confidence intervals) comparing Māori or Pacific children and Other Ethnicity children to European children.

	European N=307	Māori or Pacific N=64	Other N=51
<b>Categorical risk factors; odds ratios and 95% confidence intervals</b>			
Maternal pre-pregnancy BMI			
<25 kg/m <sup>2</sup>	1 (ref)	1 (ref)	1 (ref)
25 to <30 kg/m <sup>2</sup>	1 (ref)	1.22 (0.62 to 2.38) P=0.56	1.33 (0.68 to 2.57) P=0.40
≥30 kg/m <sup>2</sup>	1 (ref)	2.06 (0.99 to 4.28) P=0.05	0.57 (0.19 to 1.73) P=0.32
Mother did physical activity pre-pregnancy	1 (ref)	1.79 (0.79 to 4.06) P=0.17	1.57 (0.63 to 3.94) P=0.34
Hypertension in pregnancy	1 (ref)	1.71 (0.76 to 3.82) P=0.19	1.63 (0.69 to 3.84) P=0.26
Diabetes in pregnancy	1 (ref)	0.87 (0.18 to 4.25) P=0.86	1.06 (0.22 to 5.08) P=0.94
Exclusive breastfeeding in first 3 days	1 (ref)	0.93 (0.46 to 1.87) P=0.84	1.18 (0.54 to 2.58) P=0.68
Exclusive breastfeeding at 3 months	1 (ref)	0.98 (0.56 to 1.72) P=0.95	1.52 (0.82 to 2.82) P=0.19
Solid foods introduced by 3 months	1 (ref)	1.46 (0.80 to 2.64) P=0.22	1.16 (0.60 to 2.25) P=0.66
<b>Continuous risk factors; mean differences and 95% confidence intervals</b>			
Mother's diet in pregnancy*			
<i>Processed foods (SD)</i>	0 (ref)	0.02 (-0.25 to 0.29) P=0.89	-0.12 (-0.41 to 0.17) P=0.42
<i>Snacks (SD)</i>	0 (ref)	0.24 (-0.03 to 0.52) P=0.08	-0.22 (-0.51 to 0.08) P=0.15
<i>Healthy foods (SD)</i>	0 (ref)	-0.01 (-0.29 to 0.27) P=0.92	0.09 (-0.21 to 0.39) P=0.55
<i>Sweet foods (SD)</i>	0 (ref)	-0.26 (-0.53 to 0.01) P=0.06	-0.03 (-0.32 to 0.26) P=0.82
<i>Starchy foods (SD)</i>	0 (ref)	0.26 (-0.02 to 0.54) P=0.07	0.38 (0.08 to 0.68) P=0.01
Child's weight in first week (kg)	0 (ref)	0.03 (-0.13 to 0.19) P=0.73	-0.09 (-0.26 to 0.08) P=0.28
Child's weight at 3 months (kg)	0 (ref)	0.11 (-0.14 to 0.36) P=0.40	0.05 (-0.22 to 0.32) P=0.73

\* Dietary pattern scores are standardised to have a mean of zero and variance of one; values in this table can therefore be interpreted as standard deviations from the overall population mean

**Supplementary Table 7. Association between ethnicity and infant weight at age 3 months, and the degree to which this is explained by other risk factors in participants with complete data on all variables. N=422**

Values are mean differences (95% confidence intervals) in infant weight at age 3 months (kg) from linear regression, comparing each ethnic group with the reference category, European ethnicity

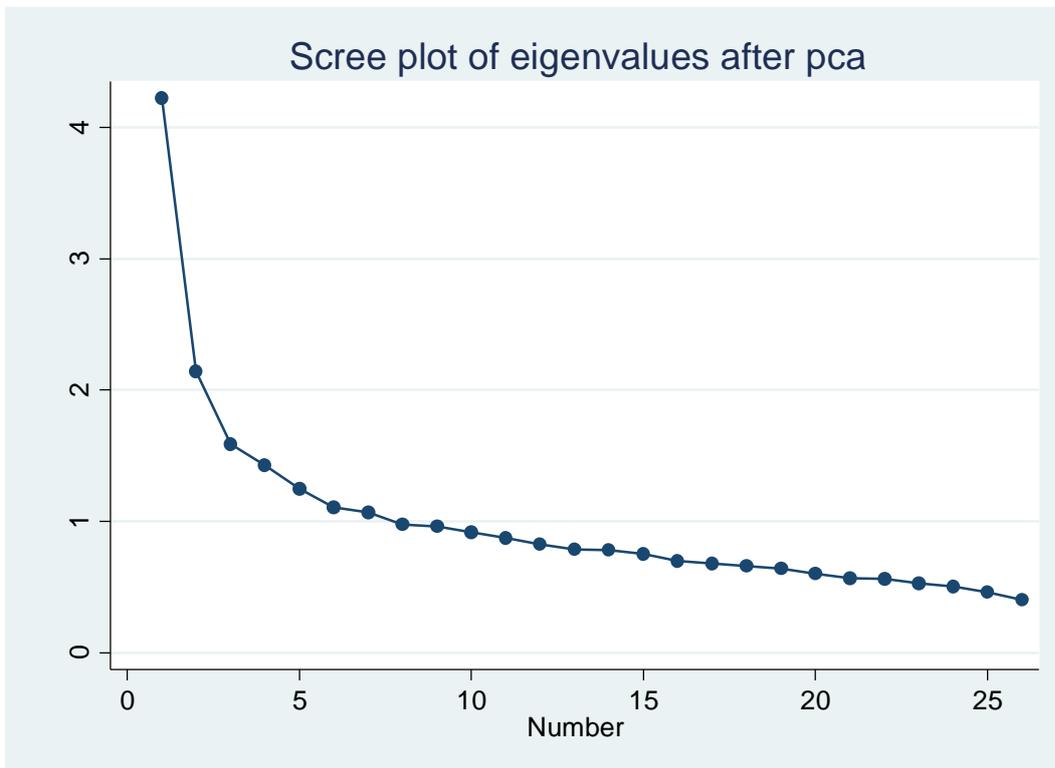
	Mean difference (95% CI) in infant weight at 3 months (kg)		
	European N=493	Māori or Pacific N=115	Other N=79
<i>Unadjusted</i>	0 (ref)	0.13 (-0.11 to 0.37) P=0.30	0.04 (-0.23 to 0.30) P=0.79
<i>Adjusted for socio-demographic variables*</i>	0 (ref)	0.11 (-0.14 to 0.36) P=0.40	0.05 (-0.22 to 0.32) P=0.73
<i>Adjusted for maternal pre-pregnancy BMI</i>	0 (ref)	0.12 (-0.12 to 0.36) P=0.34	0.04 (-0.22 to 0.31) P=0.76
<i>Adjusted for maternal dietary pattern scores**</i>	0 (ref)	0.14 (-0.10 to 0.39) P=0.25	0.02 (-0.25 to 0.29) P=0.89
<i>Adjusted for all measured potential mediators***</i>	0 (ref)	0.09 (-0.16 to 0.33) P=0.50	0.02 (-0.26 to 0.27) P=0.99

\* Adjusted for maternal education, maternal age and NZ deprivation index

\*\* Adjusted for scores for all five dietary patterns

\*\*\* adjusted for maternal education, maternal age, NZ deprivation index, maternal pre-pregnancy BMI, scores for all five dietary patterns, hypertension during pregnancy, diabetes during pregnancy, physical activity during pregnancy, exclusive breastfeeding at 3 days, exclusive breastfeeding at 3 months, and early introduction of solid foods

Supplementary Figure 1. Screeplot of Eigenvalues after PCA of dietary data



Dietary intake questionnaire used in the ELF study

**Diet**

**7.06** Since becoming pregnant, how many times a week do you eat?

	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Poultry <i>EXAMPLE: Chicken, turkey</i>	<input type="checkbox"/>				
Eggs	<input type="checkbox"/>				
Liver, pate, kidney, heart	<input type="checkbox"/>				
White fish <i>EXAMPLE: Cod, fish fingers</i>	<input type="checkbox"/>				
Other Fish <i>EXAMPLE: Tuna, mackerel</i>	<input type="checkbox"/>				
Shellfish	<input type="checkbox"/>				

**7.06 (a)** Do you eat the fat on meat?

Yes, all of it	<input type="checkbox"/>
Yes, some of it	<input type="checkbox"/>
No	<input type="checkbox"/>
Never eat meat	<input type="checkbox"/>

**7.07 Since becoming pregnant what sort of 'spreads' and 'sauces' do you use?**

	Yes	No
Butter	<input type="checkbox"/>	<input type="checkbox"/>
Unsalted butter	<input type="checkbox"/>	<input type="checkbox"/>
Polyunsaturated margarine	<input type="checkbox"/>	<input type="checkbox"/>
<i>EXAMPLE: Flora, sunflower</i>		
Butter and margarine blend	<input type="checkbox"/>	<input type="checkbox"/>
Olive oil spread	<input type="checkbox"/>	<input type="checkbox"/>
<i>EXAMPLE: Olivio</i>		
Low salt margarine	<input type="checkbox"/>	<input type="checkbox"/>
Reduced fat margarines	<input type="checkbox"/>	<input type="checkbox"/>
Nutella	<input type="checkbox"/>	<input type="checkbox"/>
Jam/honey	<input type="checkbox"/>	<input type="checkbox"/>
Marmite/vegemite	<input type="checkbox"/>	<input type="checkbox"/>
Peanut butter	<input type="checkbox"/>	<input type="checkbox"/>
Mayonnaise/salad dressing	<input type="checkbox"/>	<input type="checkbox"/>
Tomato sauce/ketchup	<input type="checkbox"/>	<input type="checkbox"/>
Gravy	<input type="checkbox"/>	<input type="checkbox"/>
Other spreads/sauces	<input type="checkbox"/>	<input type="checkbox"/>

Please describe \_\_\_\_\_

**7.08 Since becoming pregnant what sort of fat do you mainly use for frying, cooking or BBQ?**

	Yes	No
Butter, dripping, lard, solid cooking fat	<input type="checkbox"/>	<input type="checkbox"/>
Polyunsaturated margarine	<input type="checkbox"/>	<input type="checkbox"/>
<i>EXAMPLE: Flora, Sunflower, Olivio</i>		
Sesame seed oil	<input type="checkbox"/>	<input type="checkbox"/>
Sunflower, soya, corn, olive oil	<input type="checkbox"/>	<input type="checkbox"/>
Other vegetable oil	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

Please describe \_\_\_\_\_

**Vegetables & Fruit**

**7.09 Since becoming pregnant, how many times a week do you eat?**

	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Baked beans	<input type="checkbox"/>				
Peas, sweetcorn, broad beans	<input type="checkbox"/>				
Cabbage, brussel sprouts, kale & other green leafy vegetables	<input type="checkbox"/>				
Other green vegetables	<input type="checkbox"/>				
<i>EXAMPLE: Cauliflower, runner beans, leeks</i>					
Carrots	<input type="checkbox"/>				
Potatoes	<input type="checkbox"/>				

Other root vegetables	<input type="checkbox"/>				
<i>EXAMPLE: Turnip, swede, parsnip</i>					
Salad	<input type="checkbox"/>				
<i>EXAMPLE: Lettuce, tomatoes, cucumber, etc</i>					
Boiled vegetables	<input type="checkbox"/>				
Stir-fried vegetables	<input type="checkbox"/>				
Frozen vegetables	<input type="checkbox"/>				
Processed fruit	<input type="checkbox"/>				
Frozen fruit	<input type="checkbox"/>				
Fresh fruit	<input type="checkbox"/>				
<i>EXAMPLE: Apple, pear, banana, orange, grapes etc</i>					
Other fruit/veges not listed	<input type="checkbox"/>				

## Grains

7.10 Since becoming pregnant, how many times a week do you eat?	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Oat cereals	<input type="checkbox"/>				
<i>EXAMPLE: Porridge, muesli</i>					
Wholegrain/bran cereals	<input type="checkbox"/>				
<i>EXAMPLE: Weetbix, All Bran, Bran Flakes, Fruit &amp; Fibre</i>					
Other cereals	<input type="checkbox"/>				
<i>EXAMPLE: Cornflakes, Rice bubbles, Special K</i>					

**7.11 Since becoming pregnant, how many pieces of bread, rolls, chappatis & pita bread do you eat on a usual day?**

Less than 1	<input type="checkbox"/>
1-2	<input type="checkbox"/>
3-4	<input type="checkbox"/>
5 or more	<input type="checkbox"/>

**7.12 What types of bread do you eat most days?**

 *Multiple answers possible*

	Yes	No	Don't know
White bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brown/granary bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wholemeal bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chappatis, Nan bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Please describe</i> _____			
Don't usually eat any bread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Legumes

7.13 Since becoming pregnant, how many times a week do you eat?

	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Pulses <i>EXAMPLE: Dried beans, lentils</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nuts, nut roast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bean curd (tofu)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tahini <i>EXAMPLE: Used to make hummus, almond butter, peanut butter</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soya meat, vegeburgers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other legumes not listed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Dairy Food

### 7.14 Since becoming pregnant, how often have you eaten the following?

	Never	Less than once a week	1-6 times a week	More than 6 times a week	Don't know
Yoghurt (Full)	<input type="checkbox"/>				
Yoghurt (Lite)	<input type="checkbox"/>				
Yoghurt (Low fat)	<input type="checkbox"/>				
Cream (Full)	<input type="checkbox"/>				
Cream (Lite)	<input type="checkbox"/>				
Cream Cheese (Full)	<input type="checkbox"/>				
Cheese	<input type="checkbox"/>				
<i>EXAMPLE: Edam, mozzarella</i>					

### 7.15 Do you drink milk?

Yes  → IF 'YES' PLEASE GO TO QUESTION 7.15(a)

No  → IF 'NO' PLEASE GO TO QUESTION 7.16

**7.15**  
**(a) What type of milks do you drink?**

	Usually	Some times	Not at all	Don't know
Silver top (Full cream)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blue top (Common)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Light Blue top (Lite)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dark Green top (Super trim)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Orange top (Vitamin A & D)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yellow top (Extra calcium)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purple top (Omega 3 & Vitamin E)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soya milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rice milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goat/sheep milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Milk powder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7.16 Since becoming pregnant, do you drink fresh milk directly from a farm?**

- Yes  → IF 'YES' PLEASE GO TO QUESTION 7.16(a)
- No  → IF 'NO' PLEASE GO TO QUESTION 7.17

**7.16**  
**(a) Do you normally boil this milk?**

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

**7.16 (b)** Since becoming pregnant, how many glasses of fresh milk directly from a farm have you drunk?

Glass per week

**Other Food**

**7.17** Since becoming pregnant, how many times a week do you eat?

	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Pies, pasties	<input type="checkbox"/>				
<i>EXAMPLE: Pork, steak, meat</i>					
Sausages	<input type="checkbox"/>				
Hamburgers	<input type="checkbox"/>				
Pizza	<input type="checkbox"/>				
Chips/fries	<input type="checkbox"/>				
BBQ food	<input type="checkbox"/>				
Fried food	<input type="checkbox"/>				
<i>EXAMPLE: Fried fish, eggs, bacon, chops etc</i>					
Roast potatoes (Cooked in fat)	<input type="checkbox"/>				
Boiled/mashed potatoes	<input type="checkbox"/>				
Rice (Boiled)	<input type="checkbox"/>				
Pasta	<input type="checkbox"/>				

EXAMPLE: *Spaghetti, noodles*

Other food not listed

<input type="checkbox"/>				
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## Snacks

**7.18** Since becoming pregnant, how many times a week do you eat?

	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Pudding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Fruit pie, crumble, cheese-cake, mousse, gateaux</i>					
Biscuits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Digestives, shortbread, gingernuts, chocolate biscuits</i>					
Cripbreads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Ryvita, cabin bread</i>					
Cakes or buns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Fruit cake, sponge, teacake, buns, doughnuts, scones, custard pie</i>					
Chocolate bars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Mars, Twix, Moro, Picnic, Bounty, Crunchie</i>					
Chocolate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Dairy milk, plain, dark, nut, fruit, filled</i>					
Sweets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXAMPLE: <i>Boiled lollies, toffees</i>					
Crisps/potato chips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other snacks not listed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7.19** How many times a week do you eat take-away foods for your main meals?

Never or rarely

1-2

3-4

5 or more

10 or more

**Seasoning**

**7.20** When you are eating, do you regularly add:

	Never	Rarely	Often	Always
Pepper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salt (Table)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salt (Rock)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soya sauces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other sauces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other spices/condiments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*EXAMPLE: Brewer's yeast, sea kelp granules, fresh herbs*

## Drinks

### 7.21 Since becoming pregnant, how many times a week do you drink?

	Never or rarely	Once in 2 weeks	1-3 times a week	4-7 times a week	More than once a day
Fizzy drinks (In a can) <i>EXAMPLE: L&amp;P, Sprite, Coca Cola</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fizzy drinks (In a bottle) <i>EXAMPLE: L&amp;P, Sprite, Coca Cola</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bottled juice <i>EXAMPLE: Keri juice</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Juice in a carton <i>EXAMPLE: Just Juice, Fresh up, Ribena</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water (Carbonated) <i>EXAMPLE: Spring water, H<sub>2</sub>O sparkling drink</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Herbal teas (Non caffeine)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other drinks not listed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 7.22 Do you regularly drink tea?

Yes  → IF 'YES' PLEASE GO TO QUESTION 7.22(a)

No  → IF 'NO' PLEASE GO TO QUESTION 7.23

**7.22**  
**(a)** How many cups of tea do you drink in a day?

 Do not include Herbal teas

Cups

**7.22**  
**(b)** How many cups of tea you drink each day are decaffeinated?

Cups

**7.23** Do you regularly drink coffee?

Yes  → IF 'YES' PLEASE GO TO QUESTION 7.23(a)

No  → IF 'NO' PLEASE GO TO QUESTION 7.24

**7.23**  
**(a)** How many cups of decaffeinated coffee do you drink in a day?

Cups

**7.23**  
**(b)** How many cups of instant coffee do you drink each day?

Cups

**7.23**  
**(c)** How many cups of real coffee do you drink each day?

Cups

**7.24 How many teaspoons or honey or sugar do you add to hot drinks?**

Never or rarely

1-2

3-4

5 or more

**7.25 Do you drink Herbal teas at all?**

Yes, sometimes or always



**IF 'YES' PLEASE GO TO QUESTION 7.25(a)**

No, not at all



**IF 'NO' PLEASE GO TO QUESTION 7.26**

**7.25 What do you drink?  
(a)**

*Give exact name if you can*

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**7.25 In which Trimester period?  
(b)**

*Multiple answers possible*

1<sup>st</sup> Trimester (ie 1<sup>st</sup> 3 months)

2<sup>nd</sup> Trimester (ie 2<sup>nd</sup> 3 months)

3<sup>rd</sup> Trimester (ie 3<sup>rd</sup> 3 months)

7.25  
(c) How many times a day did you drink this tea?

Times